REMARKS

I. Introduction

Claims 1 and 9 were rejected under 35 U.S.C. 102(b) as being anticipated by Wojcicki et al. (US 5,190,522). Applicant responded by amending claims 1 and 9 to set forth a method wherein intra-catheter pressure is monitored for a time rate of change profile. Wojcicki et al. was characterized as monitoring a measured pressure for constant pressure and stroke volume. See, col. 5, lines 52-55. Further, the device in Wojcicki was noted to operate such that pressure is tracked and controlled by increasing or decreasing the frequency of the pump cycles. See, col. 5, lines 6-17.

Applicant's contention was that amended claims 1 and 9 are not anticipated by Wojcicki and the rejection should be withdrawn.

Claims 2-8 and 10-14 were rejected under 35 U.S.C. 103(a) as being unpatentable over Wojcicki et al., in view of Ward et al (US 5,713,923). Applicant responded that Ward is relied upon for the dosage ranges specified in the dependent claims to claims 1 and 9. However, it was further pointed out that neither Wojcicki nor Ward discloses a method wherein intra-catheter pressure is monitored for a time rate of change profile. Therefore, regardless of Ward's teachings with regard to dosage ranges, the combination of Wojcicki and Ward fails to provide the subject matter, as a whole, of claims 2-8 and 10-14.

Applicant's further contention was that claims 2-8 and 10-14 are not unpatentable for obviousness from Wojcicki in view of Ward and the rejection should be withdrawn.

II. Response to Amendment

In the office action of June 1, 2005, the previous amendment was deemed to not be fully responsive to the prior office action because of an inadequate discussion and argument directed to the monitoring difference between the pending claims and Wojcicki et al.

III. Applicant's Further Response

The claimed method includes observing a measured intra-catheter pressure versus time during the bolus delivery, wherein observation is made as to whether the measured pressure initially increases at an approximately linear rate followed by a decrease in measured pressure. As previously indicated, this means that pressure is monitored for a time rate of change profile. That is not the same as Wojcicki's monitoring for constant pressure and stroke volume. Moreover, it is not merely a monitoring of increases in pressure and decreases in pressure for purposes of error correction in pump operation as is done in Wojcicki. Rather, a specific time rate of change profile is specified, not merely increases and decreases in pressure. Wojcicki does not specify that a particular pattern is to be observed during monitoring. According to Wojcicki, the monitoring for constant pressure could involve a change in pressure wherein there is a decrease followed by an increase. Such is the nature of an error signal in a feedback control system that indicates that constant conditions of the pumping operation are not present and a malfunction is occurring. See Wojcicki at col. 5, lines 46-55, and col. 6, lines 60-66.

In summary, Wojcicki concerns pressure error control in a feedback control system as shown in Fig. 1. The present invention monitors for a specific time rate of change profile for the intra-catheter pressure.

III. Conclusion

In view of the amendments previously made to the claims and the remarks herein, Applicant submits that all pending claims are now in form and condition for allowance.

Respectfully submitted,

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